

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-14. (Canceled)

15. (Currently Amended) Method for hydrometallurgical treatment of cells and batteries comprising at least:

a lithium-based anode,

a salt dissolved in an electrolyte, and

a cathode comprising at least a metal or a combination of metals

selected from the group consisting of cobalt, nickel, manganese and iron,

for recovering recoverable fractions ~~and, the method~~ comprising:

dry crushing at room temperature in an inert atmosphere,

treatment by at least magnetic separation and densimetric table

followed by an aqueous hydrolysis,

for the purposes of recovering ~~at least at least:~~

lithium in the form of carbonate or lithiophosphate,

an anion of ~~said salt~~ the salt dissolved in the electrolyte, and

a concentrate comprising at least one metal of said cathode,

wherein the salt dissolved in the electrolyte comprises hexafluorophosphate PF₆ anion and hexafluorophosphate PF₆ anion is stabilized in an aqueous solution by means of LiCl.

16. (Original) Method according to claim 15, wherein crushing is performed in an atmosphere comprising a gas selected from the group consisting of argon and carbon dioxide or a mixture of argon and carbon dioxide in respective proportions of 10% to 90% of argon and 90% to 10% of carbon dioxide.

17. (Previously Presented) Method according to claim 16, wherein the proportion of argon in the argon and carbon dioxide mixture is between 10% and 35%.

18. (Original) Method according to claim 15, wherein crushing is performed by means of two successive mills the first of which operates at a maximum speed of 11 rpm and the second of which operates at a speed of less than 90 rpm.

19. (Original) Method according to claim 18, wherein the first mill is a rotary shearing mill whereas the second mill is an impact mill.

20. (Original) Method according to claim 15, wherein crushing forms a homogenate that is treated by a device that combines sieving to 3 mm followed by sieving to 500 micrometers, high-induction magnetic separation and a densimetric table and screening in order to separate from the homogenate, in a single run: a magnetic fraction, a dense non-magnetic fraction, a magnetic fraction with a low density and a fine fraction at least rich in metal oxides.

21. (Original) Method according to claim 20, wherein the fine fraction, formed a sieving undersized, is treated by leaching with water to recover soluble lithium in the form of lithiophosphate.

22. (Original) Method according to claim 21, wherein precipitation of the lithiophosphate is obtained by double modification of the pH by means of soda and phosphoric acid.

23. (Original) Method according to claim 21, wherein the fine fraction, from which the soluble lithium has been removed and comprising at least the cathode composed of at least a metal or a combination of metals, is dissolved in a 2N sulphuric medium at a temperature of 80°C in the presence of steel shot in a ratio between the iron and the fine fraction from which the soluble lithium has been removed of 0.15.

24. (Previously Presented) Method according to claim 23, wherein a solution resulting from acid attack of said cathode and after purification by selective precipitation of the metallic impurities is subjected to electrolysis at a temperature of 55°C under a current density comprised between 400 and 600 A/m² using two electrodes made of stainless steel and antimony-lead alloy.

25. (Original) Method according to claim 23, wherein said solution, in the case of a cobalt-based cathode attack, is a cobalt-rich solution and is treated using hypochlorite after the pH has been regulated to a value comprised between 2.3 and 2.8 to obtain a trivalent cobalt hydroxide.

26. (Canceled)

27. (Currently Amended) Method according to ~~claim 26~~ claim 15, wherein the hexafluorophosphate ~~PF₆~~PF₆ anion is recovered by precipitation by means of simple ammonium salts, quaternary ammonium, ammoniac nickel complex or Dihydro-1,4-diphenyl-3,5-phenylimino-1,2,4-triazol.

28. (Currently Amended) Method according to claim 15, wherein the cathode being ~~LiFePO₄-based~~, LiFePO₄-based, it is treated by means of 2N sulphuric acid at 80°C and then with 30% volume hydrogenated peroxide at 60°C to separate the iron from the lithium and phosphate.